

REMARKS

Claims 1-5, 8-12, 15-18, and 21-22 remain for reconsideration. Claims 6-7, 13-14, and 19-20 have been canceled without prejudice or disclaimer.

Applicants note with appreciation the Examiner's indication that claims 5-6 (Applicants believe the Examiner meant 6-7), 13, 14, 19, and 20 are directed to allowable subject matter.

Claims 1-4, 8-12, 15-17, and 21-22 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 6,347,106 to Dijaili in view of newly cited reference 2004/0263983 to Acree.

Briefly, embodiments of the present invention are directed to anti-reflective (AR) coatings. As explained in paragraphs [0023] for example, AR coating of laser gain media 10 is more challenging than is the case of glass insofar as semiconductor gain media typically have a very high admittance. As the dielectric half wave layer should have a refractive index higher than that of the substrate to be AR coated, there are very few choices of suitable materials.

As a result, the addition of a half wave layer results in relatively little broadening of the AR performance. Modern coating technology permits longer/thicker depositions than had been available heretofore. Hence, an alternate half wave flattening design approach is possible. The arc length of the flattening layer can be increased not by choice of material per se, but rather by number of "windings". Windings as used here refer to the thickness of the half-wave layer where each addition of a half wave thickness results in an additional winding or loop around the circle 30. In this way, the

compensating effect of the half wave or "absentee" layer can be tailored for a given material, leading to significant improvement in AR bandwidth.

On page 4 of the Office Action, the Examiner indicates that the allowable claims reciting that the absentee layer has a thickness corresponding to 1-7 or 3-4 half waves is not shown in the prior art of record. Accordingly, independent claims 1, 8, and 17 have been amended to recite "wherein the number of half wave thicknesses is 1-7" or similar language which encompasses both of these ranges. Based on this, and the Examiner's indication of allowable subject matter, it is respectfully requested that the rejection to the claims be withdrawn.

In view of the foregoing, it is requested that the application be reconsidered, that claims 1-5, 8-12, 15-18, and 21-22 be allowed and that the application be passed to issue. Please charge any shortages and credit any overcharges to Intel's Deposit Account number 50-0221.

Respectfully submitted,

/Kevin A. Reif/

Kevin A. Reif  
Reg. No. 36,381

INTEL  
LF1-102  
4050 Lafayette Center Drive  
Chantilly, Virginia 20151  
(703) 633-6834